



CAPO

Kobe, Fukiai High School : PLATON

Executive Summary

The world is coming across an aging society. Taking the example of Japan, according to the Ministry of Agriculture, Forestry and Fisheries in 2016, 1,254,000 people, about 65% of the whole farmers in Japan are over the age of 65. Agriculture is now in a hard situation because of the decreasing number of workers. Especially in small fields such as rice terraces where farm machineries cannot be used, it is hard work for the elderly to cultivate and harvest their crops, and takes time and demanding labor. Our product, “CAPO” standing for “Combines of Agricultural and Portable Objects” can make farming of these people easier and more efficient.

Mission

Our mission is to take advantages of rice terraces, that can grow crops well and aim at making farming more efficient and active with “CAPO”. “CAPO” is a “portable land” for agriculture. It enables people to cultivate and to harvest of crops in broad land and growing them in small field such as rice terrace. “CAPO” will reduce the amount of works of the farmers by the division of labor and using machines. Also, it would be done in ecological way by using bioplastic. We aim to sell 8,250,000 “CAPOs” as the final goal, but it is not in three years.

Operation/Product and Services

“CAPO,” the product we would suggest is a box-shaped basket with the size 25cm high, 100cm wide and 100cm long and has two grips, and it is made from bioplastic. We will produce them in our own factory. To use it, firstly place CAPOs on broad flat acres such as temporarily vacant land, put soil, then the seed of the crops the farmers wish to get. Next, farmers will take back their CAPOs to their small fields and bury them to leave it to grow. When they are ready to harvest, farmers would take out the CAPOs out of their land and take it back to the broad flat acres again for them to be harvested by farm machineries. It has been impossible to use machines in their small land, however, by using CAPOs and moving the crops to be harvested using farm machineries, the hardest part of cultivating and harvesting in a small land can be done very easily at once. With CAPOs, the work will be far more efficient. Those broad and vacant land can be used for something else except for the seasons of cultivation and harvest, or partly can make use of empty lots. In addition, farmers can hire part-time workers such as students on conveying the CAPOs to and from their small land and broad land. Each CAPO can be identified by a label on them.

Bioplastic is made of a wide variety of natural feedstocks including corn, potatoes, rice, tapioca, palm fiber, wood cellulose, wheat fiber and bagasse. It is carbon neutral as it doesn't emit CO₂, so it doesn't proceed to global warming as ordinary plastics would do. When buried in soil, it is decomposed to water and carbon dioxide by microorganisms, the plants use the carbon dioxide for photosynthesis, and because the microorganisms become active, it gives a good effect on soil.

Market/Industry Analysis

The market we are going to join is the farmers who possess narrow field like rice terrace, agricultural cooperatives, and companies, because “CAPO” will help them with reducing the amount of work. Because of unknown total area of narrow field around the world, and the difficulties on sales marketing without trusted basis, we will focus our business in Japan in the first three year. We are going to increase the number of products year by year. In the first year, “CAPO” aim at accounting for 100h. Our final goal of

penetrate in Japan is 8250000 m², meaning sales of 8250000 of “CAPO.” Though it will not be achieved in the first three years. We estimated this number in this flow; according to the Ministry of Agriculture, Forestry and Fisheries, 2005, the total area of rice terrace in Japan is 137578 ha. All the area is not square, so by calculating a square inscribed in a round of 1ha, the area “CAPO” can be used will be about 60% of the total. And we target 1% of this area, so then the number above comes. As the business to activate rice terrace and other fields, there are enterprises like “owners’ system,” irrigation and so on, such products like ours; which can reduce the amount of work of farmers are what has never been made, so the market is almost our monopoly.

Marketing/Strategy and implementation

Short run: We will sell the product to every farmer, agriculture cooperatives, and companies. We can be trusted by talking directly in sales, and can listen to the real situation of farmers, so this must be basically the best way for marketing. In addition, we can advertise our product on paper published by agricultural cooperatives, which costs about \$2000 dollars for ten days.

Middle Term: After the product being popular and trusted among farmers in Japan, we will expand the range of customers internationally. Some employees will go to some Asian countries for sales.

Long run: After the business taking off, we will devote funds on research expenses. Bioplastic now has much to develop, so our business can contribute to it. Also, we can produce “CAPO” in lower price, or make new products which can help farmers in more efficient ways.

Finance

(Amount in US\$)		year 1	year 2	year 3
CAPO area (ha)		100	300	825
1 Revenue	Service (charge for items)	31000000	93000000	255,750,000
	(Units sold)	1,000,000	3000000	8,250,000
	(Unit price)	31	31	31
	Total (a)	31,000,000	93,000,000	330,000,000
2 Production Costs	(Units Cost)	30	30	30
	Total (b)	-30,000,000	-90,000,000	-247,500,000
3 Expenses	Staff Salaries	-720,000	-960,000	-1,200,000
	Sales & Marketing	-72,000	-72,000	-72,000
	Rent	-6,000	-6,000	-6,000
	Others	-15,000	-70,000	-100,000
	Total (c)	-813,000	-1,108,000	-1,378,000
Profit / Loss before tax (d=a-b-c)		187,000	1,892,000	81,122,000
4 Income Tax (e)		-128,100	-656,100	-24,336,600
5 Net Profit / Loss (f=d-e)		58,900	1,235,900	56,785,400
6 Start up cost (g)	Lifeline	-12,000	0	0
	Total (g)	-12,000	0	0
Capital investment (h)	Machinery	-40,000	-80,000	-200,000
	Building	-70000	-70000	-70000
	Furniture and PC	-6,000	0	0
	Others	-10,000	0	0
	Total (h)	-126,000	-150,000	-270,000
7 Free cash flow (i=f-g-h)		-79,100	1,085,900	56,515,400
8 Funding required (j)		80,000	0	0
9 Cash Balance		900	1086800	57,602,200

Conclusion

Our product “CAPO” will play an important role in the future agriculture which would lack labor. With the use of CAPO, the hard work on small fields such as rice terraces will be reduced, and made efficient. Because of its simple system, anyone can use it and it creates part-time jobs. The use of bioplastic can raise the nutritional value of soil and even prevent global warming. It means farmers themselves can be the ones to solve social problems. It has estimation of stable profit and after two years, we would have positive balance

which meets investors’ expectations. The investment of \$80,000 is not too expensive and low-risk compared to other enterprises’ seed money. We promise to give good amount of collateral in return of your investment. Why don’t you contribute with us to solving social problems?